

INTERNATIONAL SEARCH REPORT

 Internati pplication No
 PCT/EP2004/003096

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B41F19/06 B44C1/17 A61C17/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B41F B44C A61C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4 409 063 A (ROBERT BROWN) 11 October 1983 (1983-10-11) siehe Zusammenfassung column 7, line 6 - column 12, line 5; figures 1-22	1-11
Y	EP 0 324 238 A (DELCO ELECTRONICS OVERSEAS CORPORATION) 19 July 1989 (1989-07-19) siehe Zusammenfassung column 1, line 1 - column 5, line 27; figures 1-3	1-11
Y	DE 101 48 975 A (ANTON ZAHORANSKY GMBH & CO.) 10 April 2003 (2003-04-10) cited in the application the whole document	7,8
	-/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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- *O* document referring to an oral disclosure, use, exhibition or other means
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- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

23 November 2004

Date of mailing of the international search report

02/12/2004

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International Application No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 3 817 172 A (DAVID HORTON) 18 June 1974 (1974-06-18) siehe Zusammenfassung column 1, line 3 - column 3, line 24; figure 1	10,11
A	US 5 318 660 A (MARTIN A. OLSEN ET AL.) 7 June 1994 (1994-06-07) the whole document	1-11
A	DE 43 08 977 A (HANS GROHE GMBH & CO KG) 22 September 1994 (1994-09-22) cited in the application the whole document	1-11
A	DE 34 40 131 A (AVERY INTERNATIONAL CORP.) 7 May 1986 (1986-05-07) cited in the application the whole document	1-11

INTERNATIONAL SEARCH REPORT

Internat Application No
PCT/Erz004/003096

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4409063	A	11-10-1983	US 4343670 A CA 1150144 A1 DE 3070314 D1 DK 346781 A EP 0041507 A1 IT 1200998 B JP 56501640 T WO 8101536 A1	10-08-1982 19-07-1983 25-04-1985 04-08-1981 16-12-1981 27-01-1989 12-11-1981 11-06-1981
EP 0324238	A	19-07-1989	GB 2214135 A EP 0324238 A2 US 4893555 A	31-08-1989 19-07-1989 16-01-1990
DE 10148975	A	10-04-2003	DE 10148975 A1 BE 1015093 A3	10-04-2003 05-10-2004
US 3817172	A	18-06-1974	AU 459584 B2 AU 3583171 A BE 775468 A1 CA 951474 A1 DE 2156850 A1 FR 2114803 A5 GB 1308164 A IT 942872 B NL 7115852 A	10-03-1975 24-05-1973 16-03-1972 23-07-1974 25-05-1972 30-06-1972 21-02-1973 02-04-1973 19-05-1972
US 5318660	A	07-06-1994	NONE	
DE 4308977	A	22-09-1994	DE 4308977 A1 AT 170136 T DE 59406753 D1 DK 616905 T3 EP 0616905 A2 ES 2122061 T3 JP 6346492 A US 5888623 A	22-09-1994 15-09-1998 01-10-1998 25-05-1999 28-09-1994 16-12-1998 20-12-1994 30-03-1999
DE 3440131	A	07-05-1986	DE 3440131 A1 AT 45316 T CA 1267033 A1 DE 3572140 D1 EP 0179977 A2 JP 2691710 B2 JP 61179745 A US 4906316 A	07-05-1986 15-08-1989 27-03-1990 14-09-1989 07-05-1986 17-12-1997 12-08-1986 06-03-1990